

# Hydrodynastes melanogigas Franco, Fernandes and Bentim, 2007 (Squamata: Serpentes: Colubridae): Range extension and new state record

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**ABSTRACT:** Two specimens of the poorly known Colubridae snake *Hydrodynastes melanogigas* were collected in the municipality of Carolina, southwestern state of Maranhão in gallery forests on the Tocantins River. These records represent the northernmost locality for the species.

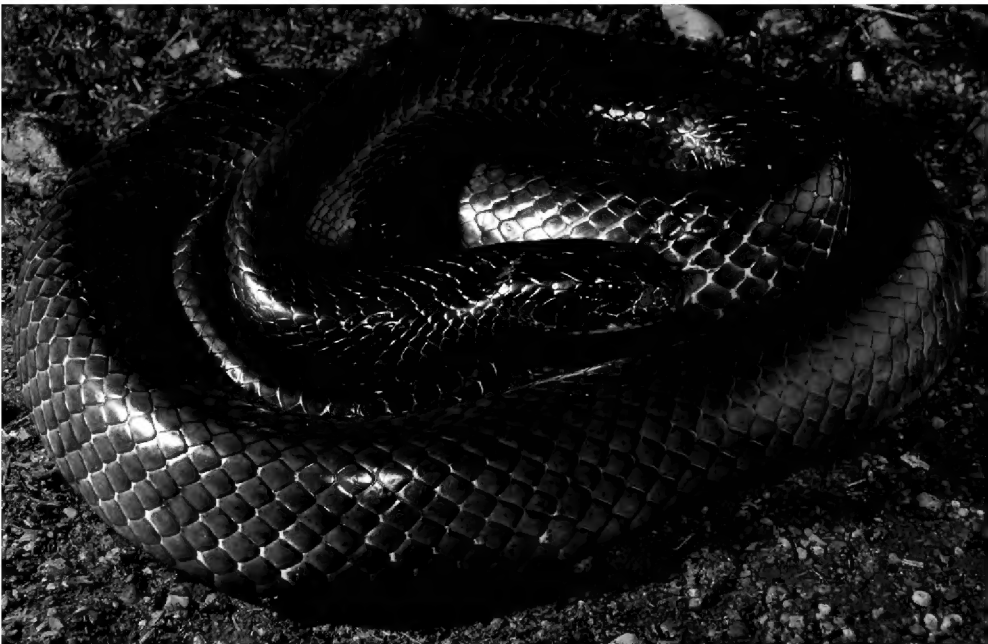
The genus *Hydrodynastes* Fitzinger, 1843 is easily diagnosed by the combination of the following external morphological characters: presence of subocular scales (supralabials do not contact the orbit), preocular, anal plate entire, rostral not modified, 2 internasals, 2 pairs of chinshields or more and dorsals in odd numbered rows with reduction (Starace 1998). The genus has semi-aquatic living habits (Cunha and Nascimento 1978) and currently comprises three species: *H. gigas* Duméril, Bibron and Duméril, 1854, *H. bicinctus* Hermann, 1804, and the most recently described *H. melanogigas* Franco, Fernandes and Bentim, 2007 which can be distinguished from its congeners by having a general melanistic color pattern, two apical pits, and a creamish-brown venter outlining two lateral stripes that disappears gradually towards the tail. *Hydrodynastes melanogigas* is also the least known species of the genus being reported only from the State of Tocantins, Central Brazil (Franco *et al.* 2007).

We hereby report a new record of *Hydrodynastes melanogigas* (Figure 1) and provide a geographic distribution map. Two specimens (a male and a female) were collected during a fieldwork in the municipality of Carolina, southwestern State of Maranhão (07°20'32" S, 47°28'20" W), in June 2010. The specimens were caught within gallery forests on the Tocantins River in altitudes of 175 and 190 m asl.

Morphometric and scutellation data follows Dowling (1951) and Peters (1964). Measurements were taken using a digital caliper to the nearest 0.1 mm, except for snout-vent length (SVL) and tail length (TL), which were taken with a flexible ruler to the nearest millimeter. The collecting activity was legally permitted under the process IBAMA 02001.005151/2003-21 and permit IBAMA 0187/2009 - CGFAU/LIC.

The male has a total length of 2.092mm (SVL=1.580mm and TL=512mm) and the female 1.885mm (SVL=1.455mm and TL=430mm). Other data are included in Table 1.

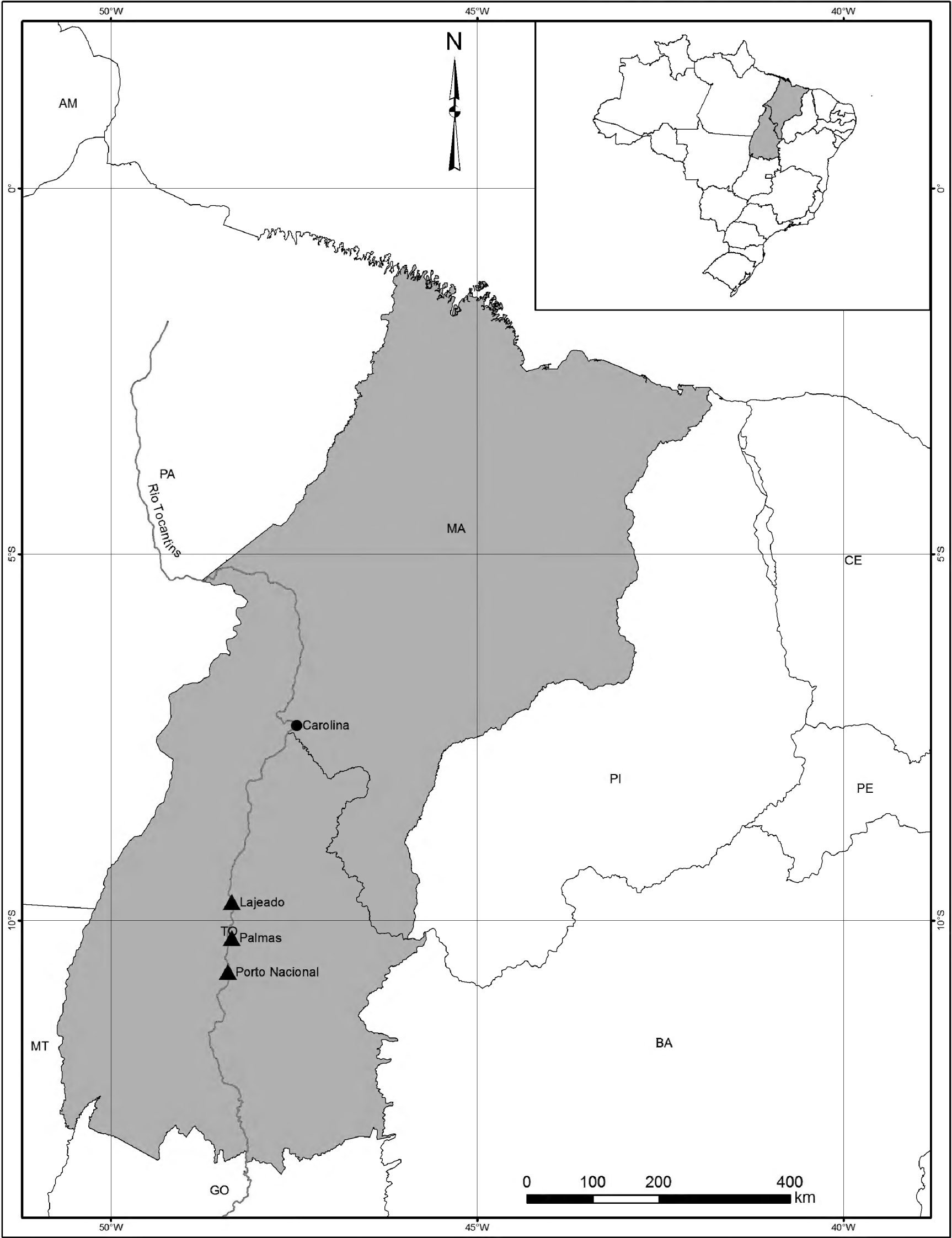
Specimens were deposited at the herpetological collection of the Museu Paraense Emílio Goeldi (MPEG 24383 and 24384). This is the first record for the state of Maranhão and corresponds to the northernmost limit of this taxon, extending ca. 350 km N-NE from the municipality of Lajeado, Tocantins state (Figure 2) (Franco *et al.* 2007).



**FIGURE 1.** Adult male *Hydrodynastes melanogigas* collected in the municipality of Carolina, Maranhão. Photo by Itamar Jr. Tonial.

**TABLE 1.** Pholidosis and measurements (mm) of the specimens of *Hydrodynastes melanogigas* collected at the municipality of Carolina. VE = number of ventrals; DO = number of dorsals; SC = number of subcaudals; SL = number of supralabials; IL = number of infralabials; HL = head length; SVL = snout-vent length; TL = tail length; MD = midbody diameter.

Characters	MPEG 24384 ♀	MPEG 24383 ♂
VE	170	166
DO	19/19/15	19/19/15
SC	78	77
SL	8/8	8/8
IL	10/10	9/10
HL	50.16	54.25
SVL	1455.00	1580.00
TL	430.00	512.00
MD	41.16	55.27



**FIGURE 2.** Geographic distribution of *Hydrodynastes melanogigas* indicating the previously known localities on Tocantins state (triangles) and the new record for Maranhão state (circle).

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**LITERATURE CITED**

Cunha, O.R. and F.P. Nascimento. 1978. Ofídios da Amazônia X - As cobras da região leste do Pará. *Publicações Avulsas do Museu Paraense Emílio Goeldi* 31: 1-218.  
Dowling, H.G. 1951. A proposed standard system of counting ventrals in snakes. *British Journal of Herpetology* 1(5): 97-99.

Franco, F.L., D.S. Fernandes and B.M. Bentim. 2007. A new species of *Hydrodynastes* Fitzinger, 1843 from central Brazil (Serpentes: Colubridae: Xenodontinae). *Zootaxa* 1613: 57-65.  
Peters, J.A. 1964. *Dictionary of herpetology*. New York and London: Hafner Publishing Company. 392 p.  
Starace, F. 1998. *Guide des Serpents et Amphisbènes de Guyane*. Guadeloupe: IBIS Rouge Editions. 450 p.

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